

Instant view: Pfizer, BioNTech say their COVID-19 vaccine is more than 90% effective

Reuters Staff

(Reuters) - Pfizer Inc [PFE.N](#) said on Monday its experimental vaccine was more than 90% effective in preventing COVID-19 based on initial data from a large study, a major victory in the fight against the pandemic.

FILE PHOTO: A woman holds a small bottle labeled with a "Coronavirus COVID-19 Vaccine" sticker and a medical syringe in front of displayed Pfizer logo in this illustration taken, October 30, 2020. REUTERS/Dado Ruvic

Pfizer and German partner BioNTech SE [BNTX.O](#) are the first drugmakers to show successful data from a large-scale clinical trial of a coronavirus vaccine.

Following are reactions to the news.

Scientists' reactions

ALEXANDER GINTSBURG, DIRECTOR OF MOSCOW'S GAMALEYA INSTITUTE WHICH DEVELOPED RUSSIA'S MAIN VACCINE CANDIDATE, SPUTNIK V

"We welcome the progress shown by our foreign colleagues in the development of a vaccine against the new coronavirus. The more vaccines are available in the world, the better people will be protected.

"People at high risk of infection - primarily medical workers - are already being actively vaccinated in our country. Production is being scaled up and new production sites are joining the process. In the near future we expect to publish interim results of the post-registration trial of the vaccine Sputnik V, the so-called Phase III trials. I am sure that its effectiveness level will also be high."

CLEMENS WENDTNER, CHIEF PHYSICIAN OF INFECTIOLOGY AND TROPICAL MEDICINE AND HEAD OF THE SPECIAL UNIT FOR HIGHLY CONTAGIOUS LIFE-THREATENING INFECTIONS, MUNICH SCHWABING CLINIC, GERMANY

"This is remarkable, as many ongoing vaccination studies on COVID-19 currently only assume a success rate of at least 50%. In addition, it should be emphasized that a sharp end point has been defined - infection yes or no. Alternatively, with less high expectations of a vaccine, already attenuated disease courses, so-called mitigated courses, could be considered a success. In addition, the mRNA vaccination appears to be effective after only four weeks, which means that one does not have to wait long for protection."

WALID GELLAD, PROFESSOR OF MEDICINE, UNIVERSITY OF PITTSBURGH, UNITED STATES

"This is a hint that these mRNA vaccines are likely to work, and there's at least one other. And they're likely to be safe, at least from this trial. So that's highly encouraging. The other thing that's highly encouraging is that science can now create a vaccine in a relatively short amount of time and test it, which gives a lot of hope for the future when these things happen again."

ANDREW HILL, SENIOR VISITING RESEARCH FELLOW IN THE DEPARTMENT OF

PHARMACOLOGY AT THE UNIVERSITY OF LIVERPOOL, BRITAIN

“This vaccine needs to be stored at -80c. This could create major logistical challenges for mass treatment outside major urban areas and in low or middle income countries.”

“However, overall this is a huge step forwards in the fight against COVID-19. We will need to see whether updated versions of this vaccine are needed to protect people against new strains of the virus which might emerge in future.”

RICHARD HATCHETT, CHIEF EXECUTIVE OF THE CEPI COALITION FOR EPIDEMIC PREPAREDNESS INNOVATIONS

“These are hugely positive and encouraging interim results and are testament to the ingenuity and skill of the scientific community in advancing vaccine candidates against COVID-19. We commend Pfizer/BioNTech on this historic interim result and the speed at which they have advanced through clinical development.

“We believe these interim results also increase the probability of success of other COVID-19 candidate vaccines which use a similar approach [pre-fusion spike as their immunogen], including all of the vaccines in the CEPI portfolio.”

PETER HORBY, PROFESSOR OF EMERGING INFECTIOUS DISEASES AT UNIVERSITY OF OXFORD, BRITAIN

“This news made me smile from ear to ear. It is a relief to see such positive results on this vaccine and bodes well for COVID-19 vaccines in general.

“Of course we need to see more detail and await the final results, and there is a long, long way to go before vaccines will start to make a real difference, but this feels to me like a watershed moment.”

ELEANOR RILEY, PROFESSOR OF IMMUNOLOGY AND INFECTIOUS DISEASE AT THE UNIVERSITY OF EDINBURGH, BRITAIN

“At face value, this is exceptionally good news: a vaccine that is 90% effective at preventing symptomatic cases of COVID-19 and with millions of doses available by the end of the year.

“However, the full data set on which the claim is based has not yet been released and so we don’t know exactly what has been found.”

LAWRENCE YOUNG, PROFESSOR OF MOLECULAR ONCOLOGY AT UNIVERSITY OF WARWICK, BRITAIN

“It’s hard to interpret the interim analysis, but it does appear very encouraging.”

“In this... preliminary analysis there is a significant reduction in the COVID-19, and I interpret that to mean that ... individuals are not developing disease, but it doesn’t tell us anything about whether people are getting infected or not.”

JOHN MOORE, PROFESSOR AT WEILL CORNELL MEDICAL COLLEGE, NEW YORK CITY

“I can see nothing problematic.”

As for what this means for other vaccines, Moore said: “Moderna’s is likely to work as well given the similar design and performance, and Novavax also, as it seems more potent. It’s harder to judge about the other candidates.”

MICHAEL HEAD, SENIOR RESEARCH FELLOW IN GLOBAL HEALTH, UNIVERSITY OF SOUTHAMPTON, BRITAIN

“This cautiously sounds like an excellent result from the phase 3 trials, but we should remain a

little cautious. The provisional findings are made available in a press release, and the study is ongoing. However, if the final results show an effectiveness of anywhere near 90% with response in elderly and ethnic minority populations, that is an excellent result for a first generation vaccine.

“This has been seen before – the rapidly-produced ebola vaccine generated very high levels of effectiveness and exceeded all expectations. Equally, billions of dollars and numerous clinical trials have struggled to produce any form of vaccination against HIV. Science can be unpredictable.”

AZRA GHANI, CHAIR IN INFECTIOUS DISEASE EPIDEMIOLOGY, IMPERIAL COLLEGE LONDON

“These new results represent the first demonstration of substantial efficacy of a vaccine candidate against COVID-19 disease which is very welcome news. It is important to bear in mind that these are early results based on a relatively small number of cases. In addition, the efficacy estimate is based on seven days of follow-up of participants following the second dose; further data in the coming weeks and months will provide a better picture of longer-term vaccine efficacy.”

WILLIAM SCHAFFNER, INFECTIOUS DISEASES EXPERT AT VANDERBILT UNIVERSITY MEDICAL CENTER, NASHVILLE, TENNESSEE, UNITED STATES

“The efficacy data are really impressive. This is better than most of us anticipated. I would have been delighted with efficacy of 70% or 75%. 90% is very impressive for any vaccine. The study isn’t completed yet, but nonetheless the data look very solid.”

IAN JONES, PROFESSOR OF VIROLOGY AT UNIVERSITY OF READING, BRITAIN

“Of all the vaccines currently in development the BioNtech product always looked like the most bang-per-buck as it is entirely focused on the part of the virus that binds to the human cell, the receptor binding domain.

“The only things we will not know for some time is the longevity of the response in all age groups, but assuming antibody titres are high that should be at least as good as any other vaccine currently in trial.”

JOHN BELL, REGIUS PROFESSOR OF MEDICINE AT UNIVERSITY OF OXFORD WHO SITS ON THE UK GOVERNMENT’S VACCINE TASKFORCE, TOLD BBC RADIO:

“I’m really delighted with this result for no other reason than it shows you you can make a vaccine against this little critter. As you know, there are many pathogens where we’ve tried for decades and never managed to get a vaccine, you know, malaria, HIV.”

“Distribution of this is going to be challenging, and there’s a lot of complexities associated with that. But... that’s not the headline here. The headline is, we’ll solve those things if we need to. But... it rolls the pitch for other vaccines because I can’t see any reason now why we shouldn’t have a handful of good vaccines available to this disease.

“Our (Oxford’s) first interim analysis is also likely to be available in the very near future, and by that I mean weeks, not months. So, I’m pretty optimistic that given this result, we’ll have a reasonably good chance of getting a good result as well.”

“When you look at the immunological responses you get from the Oxford/AstraZeneca vaccine and the ones from the Pfizer/BioNTech vaccine and indeed even the Moderna vaccine. They all look about the same. So, I’m optimistic that that probably reflects similar levels of efficacy.”

FLORIAN KRAMMER, PROFESSOR AT THE DEPARTMENT OF MICROBIOLOGY, ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI, USA

“These are fantastic results. The efficacy could be higher than expected, and this probably means that - at least in the U.S. - there will be an application for approval very soon. Of course, it would be better to see age-specific data, but I suspect that these will be published soon. Frankly, this is the best news I have received since Jan. 10.”

MARYLYN ADDO, HEAD OF TROPICAL MEDICINE SECTION, UNIVERSITY MEDICAL CENTER EPPENDORF (UKE), HAMBURG, GERMANY

“These are interesting first signals, but again they are only communicated in press releases. Primary data are not yet available and a peer-reviewed publication is still pending. We still have to wait for the exact data before we can make a final assessment. At present, there are still few details about the exact data, for example regarding different age groups and in which groups the 94 cases occurred exactly.”

BERND SALZBERGER, HEAD OF INFECTIOLOGY, UNIVERSITY HOSPITAL REGENSBURG, GERMANY

“In the Pfizer/Biontech press release, the Phase II/III placebo-controlled observer-blinded study with the vaccine BNT162b2 reported a vaccine efficacy of over 90%. Although only a few events - a total of 94 cases - have been observed in the study so far, this is a very good result. No serious side effects have been reported - overall a very positive result, which will probably lead to an early approval.”

GERD FAETKENHEUER, HEAD OF INFECTIOLOGY, CLINIC I FOR INTERNAL MEDICINE, UNIVERSITY HOSPITAL COLOGNE, GERMANY

“These are great and promising data. It is incredible that in such a short period of time this progress with the development of a vaccine and clinical trials within a few months has been achieved. The results on efficacy and safety so far are excellent.

“I think this will have a major impact on our handling of the pandemic and I hope that large quantities of the vaccine will be available quickly. The researchers involved can only be congratulated”.

DANNY ALTMANN, PROFESSOR OF IMMUNOLOGY AT IMPERIAL COLLEGE LONDON

In terms of the impact on the COVID-19 pandemic, “it’s good news, but it’s not ‘overnight success’ good news”.

Altmann cautioned that this and other potentially successful vaccines would still need to be approved and delivered to people across the world, and this will still take many months.

He added, however: “I always felt optimistic, and my optimism remains strong.”

Government reaction

ITALIAN HEALTH MINISTER ROBERTO SPERANZA

“Today’s news about the anti-COVID vaccine is encouraging. But caution is still needed. Scientific research is the real key to overcoming the emergency. In the meantime, we must never forget that the behaviour of each of us is essential to bend the curve.”

SWITZERLAND’S HEALTH MINISTRY

“We welcome every advance made by the global efforts to come up with a COVID-19 vaccine. The federal government is working intensively to as quickly as possible to give the Swiss people

access to a safe and effective vaccine. We've signed two contracts already, with Moderna and AstraZeneca, and we're currently in negotiations with additional, promising vaccine makers."

Corporate reaction

LUCIO ROVATI, CEO OF ITALY'S ROTTAPHARM BIOTECH, WHICH IS WORKING WITH TAKIS BIOTECH ON A COVID-19 VACCINE

"This is important news. Nothing that was not expected. Anyway, great, great. The problem remains that the data is limited in duration, 28 days after the first inoculation. The problem will be to see how long the coverage lasts. But in any case it is already very important to know that there is an effective vaccine, also because it seems a vaccine well tolerated in the medium term. At the end of November data at two months will be available, as required by regulatory agencies, and so at the end of November (the vaccine) could already be approved."

QUENTIN VIVANT, SPOKESMAN FOR FRENCH DRUGMAKER SANOFI [SASY.PA](https://www.sanofi.com)

"Congratulations to our Pfizer colleagues. We feel energized to move on and bring more vaccines to the world to fight against this pandemic."

Market reaction

RUSSELL SILBERTSON, CO-HEAD OF DEVELOPED MARKET FX & RATES AT ASSET MANAGER NINETY ONE

"If the bearish view embedded in markets was that there was no effective vaccine any time soon priced in, clearly that needs significant repricing now."

"You couple (this morning's news) with the sheer weight of all the stimulus in markets, and that's a very strong economic upside scenario."

NIKESH PATEL, HEAD OF INVESTMENT STRATEGY, KEMPEN CAPITAL MANAGEMENT, LONDON

"This is the first news that allows governments to start planning ahead to when economies can properly start to reopen from lockdowns. That gives them more visibility and concreteness about what fiscal policy they can take."

"Monetary policy can only go so far at this point and it needs to be a fiscal response for a real recovery and this kind of news is great as it allows governments to make that fiscal response without fear of endless support."

NEIL WILSON, CHIEF MARKET ANALYST AT MARKETS.COM

"Whilst we are not there yet, news that this vaccine could be highly effective is the best thing markets could hope for. Public health officials will remind us there is a long road ahead, and many challenges will be faced along the way, but there is an enormous sense of optimism today – light at the end of the tunnel. Let's just hope the vaccine deniers won't get in the way, but 2021 just got a lot brighter."

KENNETH BROUX, FX STRATEGIST AT SOCIETE

GENERALE

“The COVID-19 vaccine news adds to the positive risk tone in stocks and underpins high beta currencies vs the U.S. dollar. Any positive news on a vaccine is good news for the world economy and offers perspective for rebound/normalisation in 2021 growth.”

CARSTEN BRZESKI, GLOBAL HEAD OF MACRO, ING

“The bigger driver of the economic outlook is from the outside factors. Right now that means the development of a vaccine, which is why we are following news on this front closely.”

“The base case we have already is that we are likely to get a vaccine by year-end and that it will be rolled out. So we do see news like this as positive. The worrying sign would be if we get negative news say on testing, that would hurt how we view the economic outlook.”

Reporting by Kate Kelland, Caroline Copley, Julie Steenhuysen, Josephine Mason, Dhara Ranasinghe, Saikat Chatterjee, Tom Arnold, Tommy Wilkes, Francesco Guarascio, Angelo Amante, Michael Erman, Emilio Parodi, Polina Ivanova, John Miller and Alistair Smout